

Aviation News

McGraw-Hill Publishing Company Inc.

AUGUST 16, 1943

50 CENTS



Martin's Post-War Cargo Plane: Patents for twin-engine and four-engine versions of this new cargo plane design have been granted to Glenn L. Martin Co. Special equipment built into the fuselage will speed loading and unloading operations.

4 U.S. Plane Types Aiding Russians: cobra, Havoc, Mitchell and Douglas C-47 praised by Red officers.

Criticism Hits at Plane Industry: Widely publicized reports discount actual rise in aircraft production.

Applications Pour In On CAB: truck operators flood Board with petitions for new airline routes in U.S.

Stanton Forecasts Airport Construction: Administrator sees big post-war expansion of hangar and service facilities.

Incentive Wage Plans Under Study: Government officials favor new pay system and labor priorities proposals.

Renegotiation Revises Company Statements: 1942 financial reports of aircraft corporations being corrected and reissued.

Patterson Decries Scramble for Routes: Over-expansion of U.S. carriers in international lines feared by United president.

U.S. Chamber Studies Future Transport: Special committee includes representatives of airlines, steamship and ship firms.



Above: NH-1 in foggy weather

Howard Aircraft's NH-1 FOR THE NAVY

Outstanding Single Engine
Instrument Trainer of the Year



THE AVIATION NEWS

Washington Observer

War Production Board chiefs, including Charles E. Wilson, are convinced that incentive payment plans will go a long way toward solving the critical manpower problem. Surveys made in several aircraft plants have indicated that production increases, and substantial ones, can be obtained with present personnel. These officials favor a plan which covers all employees on an overall production basis. While the involuntary strike has been raised, proponents of incentive payment plans believe they can meet all objections and in the final analysis they want production and are willing to pay for it. An incentive payment plan has worked well at Beach and an adaptation of the Beach program has been worked out for Grumman. Look for other plants to follow similar patterns soon with the blessing of WPR.

Proponents of incentive payment plans contend that unit costs will be reduced, rather than increased as some argue. In this connection, government officials are said to be considering a re-examination of the entire wage structure in the aircraft industry. While the manpower situation is most acute on the West Coast, many plants in the East will be faced with the same situation in a few months. Aircraft wages, frozen under the NWLB order of March 8 are below those for comparable work in shipbuilding and other competing industries in the area.

Boeing is moving to meet the situation through the establishment of branch plants within good transportation reach of Seattle. The Boeing plan is simply one of taking the work to communities in which manpower is available. They have nine prospective sites in mind where parts can be made for the "Flying Fortress" and shipped to the home plant for assembly. It is still too early to determine how far this will go toward solving production problems due to a shortage of manpower, but Boeing people are convinced it will help.

In another move on the manpower situation, approximately 1,000 prime contractors who have backlogs of orders amounting to \$5,000,000 or more have been requested to place future

subcontracts for fabrication of products in less critical labor supply areas. The request was in a letter signed by WPR Chief Nelson, Chairman Lord of the Maritime Commission, Under Secretary of War Patterson, Under Secretary of Navy Forrester and the Director of the Procurement Division of the Treasury Department. In allocation of war work, the procurement agencies rely on the War Manpower Commission's list of more than 300 labor market areas, classified in four groups according to the adequacy or shortage of labor supply.

Another Truman committee report is on the way, this one covering all phases of aircraft manufacturing. It probably will be issued shortly after Congress reconvenes the middle of September. Some committee members are now on an aerial tour of the South and Middle West visiting modification and other plants in Birmingham, New Orleans, Dallas, Fort Worth, Kansas City, Omaha and Chicago. The fact that the members traveled by air caused some comment in the capital.

The giant, super airframes which the Bendix supplements are fond of describing and imagining are not included in the present plans of the old-line aircraft and airline companies. On the face of practical application, the envisioned winged giants of the sky got down to four-engine jobs carrying, according to various estimates, from 50 to 60 passengers.

The separate air force subject continues to heat up in Washington conversations with the



Lockheed "Constellation" Typical outline of the future?

WRIGHT

Aircraft Engines

28
points

of
contact

The name "Wright" represents the state of engineering skill in aircraft engine design and production. Outstanding quality is a "must" in every part selected for use in a Wright engine.

Auburn

CERAMIC SPARK PLUG CONNECTORS

were selected for use in Wright engines after exhaustive tests. The selection is a tribute to the value of Auburn Connectors in maintaining consistent contact. Auburn Connectors do not carbon-track, foul, burn or absorb moisture.

Write us for information.

AIRCRAFT DIVISION

AUBURN SPARK PLUG COMPANY, Inc.
1180 Raymond Blvd. Newark 2, N. J.

AUBURN SPARK PLUG COMPANY, Inc.

MAIN OFFICE AND FACTORY, AUBURN, N. Y.



AVIATION NEWS

August 16, 1943

CONTENTS

	PAGE
Washington Observer	5
Headline News Section	13
Taking the World	13
Air War	13
Aircraft Production	15
Transport	15
Personnel	23
Subsidiary	26

THE PHOTOS

	GROUP
Glenn L. Martin Co.	7
Lockheed Aircraft Corp.	8
Army Air Forces	8
Civil Aeronautics Administration	10-12
Terrific Information Service	16-18
Boeing-Terr & Robins Co.	19
Boeing Aircraft Co.	17
Staff Photo	14
Transportation & Western Air, Inc.	19
Provincetown Coastal Airplane	20
TransCanada Air Lines	20-21
Western Air Lines	20
Civil Aeronautics Board	21

THE STAFF

	POSITION
George W. Friel	Editor
Robert H. Stone	Managing Editor
C. Scott Hendry	Transport Editor
William H. McGraw	Staff Editor
Maxwell Miller	Staff Editor
Blaine Steinberg	Special Assignment Editor
Sheridan Baker	Public Case Editor
Kurt Thiermer	Staff Editor
Dallas Hagland	Art Director

Editorial Headquarters:
1252 National Press Building,
Washington, D. C.

Copyright 1943 by McGraw-Hill Publishing Co. For Published weekly price 50¢ a copy. Allow ten days for change of address. Subscriptions—United States, Alaska and Canada—\$2.50 a year. \$3.00 for two years. \$4.00 for three years. Canada \$7.00 a year. \$12.00 for two years. \$16.00 for three years. All other countries \$7.00 a year. \$14.00 for two years. \$18.00 for three years. Application for second class mailing at Post Office New York, N. Y. Entered in U.S.A. Cable Address: McGraw-Hill, New York.

James H. McGraw, Founder and Honorary Chairman; James H. McGraw, Jr., President; Harold Elsie, Executive Vice-President; Cyrus W. McGraw, Vice-President and Treasurer; Joseph A. Gensel, Secretary; J. E. Blocker, Jr., Director of Circulation; 150 West 42nd Street, New York 36, N. Y. Branch offices: Chicago, 310 North Michigan Ave.; San Francisco, 30 Post Street; Los Angeles, 1414 Broadway; Albany, 100 State Street; London, W. C. 2, Wellington, Philadelphia, Cleveland, Detroit, St. Louis, Boston, Atlanta. Service Bureau Guaranteed.

equal accompanying hashdash. The set-up is ready and it only remains for the powers that be to act. In the midst of the recurrent reports on this subject, the Gallup Poll, on the question "Would you approve or disapprove of a separate air force for the United States?" showed 75 percent of those questioned in favor and 41 percent opposed. The vote, the Gallup people said, was confined to those persons who were able to decide what is meant by a separate air force and who have followed discussion on the subject."

In this connection, the Washington Post followed up its original front-page open letter to President Roosevelt urging action in this regard, with another addressed to Secretary Egan. The Post concluded its letter to Knox with the statement that "Air Power is entitled to equality in responsibility for running this war. The country itself is entitled to it."

Concomitant of the Aeronautical Chamber of Commerce reorganization is still awaiting the selection of a man to head up the new program. Speculators of the revitalization program are looking for a man who not only is acceptable to all members of the aircraft manufacturing industry—with their varied interests—but also one who knows how to operate in Washington. A pretty big assignment in these days of manpower shortage.

The fall of July, as welcome as it would be, would deprive some of our more vigorous correspondents of an opportunity to prove a point. They looked upon Sicily simply as an air base for the bombing of Sicily. They wanted to show that a nation could be brought to its knees by bombing alone. The opportunity to present that evidence would disappear if Italy should decide to surrender. Of course there are other nations.

The War Manpower Commission all last week refused to make any comment on its "work or fight" plan to contribute to a solution of the aircraft industry's No. 1 headache, although insiders knew what was coming several days before the official statement was released last Saturday.

The Labor Department is seeking some uniform method of dealing with absenteeism, the first step being to obtain a universal definition of absenteeism and the maintenance of records which will give an accurate picture of the situation. Disciplinary measures used in some plants are more or less frowned upon, officials holding

Washington Observer

that other methods can be found which are more effective.

The Russians have their own plans for post-war aviation and their dissemination is done this with Britain and the United States is counting some favored brows among our aviation men. In view of the material and equipment being sent to Russia, the feeling is growing in some circles that we should have something in return, even if it's only a little information.

The amazing Russian victories on the Eastern front has pointed up a growing concern felt in Washington over the lack of cooperation in this country in receiving from the Soviets. We know little, if anything, about their aircraft production and even information on Russian airplanes is scanty. Even engineers of the Bell Aircraft company whose Associates are widely and successfully used by the Russians, are completely in the dark as to modifications which Russian engineers make on the Airacobra, particularly to adjust the planes for frigid flying weather.

The War Department, like the aircraft industry, is luring more and more to women employees. The first anniversary of the order issued by Secretary Stimson to replace male employees of Selective Service age with women—Aug. 14—shows that women now comprise 38 percent of all civilian employees in War Department plants as compared with about 25 percent in the summer of 1942.

A tentative program for the production of essential consumer goods necessary for the efficient functioning of the civilian economy had been submitted to WPS by the Office of Civilian Requirements. This does not mean there will be a reopening of substantial manufacture of items formerly produced for aviation, but a rather a order to determine what materials, if any, can be spared. The chances are there will be few, save fourth quarter shipments of controlled materials stock that supplies of vital metals, for example, are still falling short of military and essential civilian demands.

Although definitely a step in the right direction, the WHC's relief Saturday in setting up a list of 146 critical occupations, led by aircraft, probably won't solve all of the industry's manpower problems. It will help, of course. But aviation observers here can't imagine that a city the size of Seattle or Wichita or Buffalo can suddenly produce overnight the thousands of aircraft workers needed by local plants.

Facts about AVIATION NEWS and AIR TRANSPORT

★ ★ ★

Two new McGraw-Hill publications teamed with AVIATION to offer a complete information service to the \$20,000,000,000 Aviation Industry

Why Two New AERONAUTICAL Publications Now?

To meet the rapidly increasing information needs of war and post-war aeronautical development. To fill the urgent need for basic and specialized information directed swiftly to the men who are planning and building U. S. leadership in world aviation.

What is AVIATION NEWS?

A high-speed weekly magazine of aviation news interpretation and analysis. To bring aviation news, its meaning and its background to busy top executives. Timely. Accurate. Clear. Compact.

What is AIR TRANSPORT?

A monthly magazine wholly devoted to the program, interests and problems of the air carrier. Strictly an air transportation magazine.

Economies in paper usage which save you into effect make it possible for us to render these additional services without any reduced paper quality as established by the W. P. A.

Will AVIATION'S Scope Be Curtailed?

No. America's oldest aeronautical magazine will intensify its job of serving the men who design, engineer, produce, merchandise, operate, and maintain America's air supremacy.

How Will These Three Publications Cover The Industry's Buying Power?

AVIATION NEWS will command the weekly attention and interest of those key industry executives who must keep pace with the news and its significance.

AVIATION, with over 40,000 paid subscribers, will continue its outstanding service to all branches of the industry.

AIR TRANSPORT will serve the highly specialized needs of the air carrier, aiding and guiding all who are concerned with the progress of this fast-growing medium of passenger, freight, mail and express transportation.

AVIATION NEWS

OBJECTIVE—To bring interpretative stimulation to aeronautical news presentation—at top speed—to the top man.

EDITED BY—Donald H. Ward will bring aviation news analysis, will direct a national editorial staff in Washington, D. C. Other offices and correspondents in key cities here and abroad.

CIRCULATION—12,000, by subscription only. **SUBSCRIPTION**—Editorial rate one year \$5; three years \$15. **ADVERTISING**—Page rate (on 13 line base) \$75. Closing date 2 weeks prior to date of issue. \$25-\$50's 11 1/2". Type page 7"x11". **STOCKS**—40 lb. \$5.00—100. **FIRST ISSUE**—August 2, 1945.

AIR TRANSPORT

OBJECTIVE—To serve the specialized needs and promote the sound development of air and post-war transportation—meeting all concerned with the future of U. S. air commerce.

EDITED BY—Fedor W. Baber, long-time secretary of the Air Transport Association, will direct editorial staff headquartered at New York, assisted by editors and correspondents at key points.

CIRCULATION—12,000, by subscription only. **SUBSCRIPTION**—Special introductory shorter rate one year \$6; three years \$15. **ADVERTISING**—Page rate (on 13 line base) \$20. Closing date 10th of month preceding month of issue. \$25-\$50's 11 1/2". Type page 7"x11". **STOCKS**—40 lb. \$5.00—100. **FIRST ISSUE**—September, 1945.



McGraw-Hill Publishing Company, Inc. • 330 West 42nd Street • New York, N. Y.

AVIATION NEWS • August 16, 1945

Aviation News
McGraw-Hill Publishing Co., Inc.

VOLUME 1 - NUMBER 3

AUGUST 16, 1945

Patterson Warns of Scramble For World-Wide Air Routes

Over-expansion will bring chaos and need for complete control by government, he says.

United Air Lines' president, William A. Patterson, has urged elimination of selfishness on the part of airlines seeking to advance the individual interests of their present companies and favors joint ownership of Pan American Airways or some such single overseas line, in the interests of post-war international aviation.

Justification in what many look to be the first public detailed justification of United's refusal to sign the joint post-war policy agreement entered into by 16 major domestic carriers a month ago, Patterson said, in addressing the Los Angeles Rotary Club, that United had withheld its signature because the other lines had refused to include provision for joint ownership and operation of any company to handle all overseas routes after the war.

Asks for Realistic Approach—He pleaded for "sensitivity" and a realistic approach to post-war problems, calling for "sensitivity" by business men and a down-to-earth approach to those problems. Warning that over-expansion of facilities and financial structures from a "wild scramble" for routes would result in chaos and demand for government ownership, he deflated the picture of post-war aviation that has been painted in many quarters.

Private Ownership—Private ownership should be retained, he said, and the present leadership of this nation in the air transport field should be kept intact. He cited the recent announcement of government ownership in Canada, Britain and elsewhere, and pointed out that having rights unduly shifted have to be as a proposed loss. And if the present two overseas lines (Pan American and American Export) continue, and most of the domestic lines scramble for reciprocal rights, the result will be to strengthen the hand of those "big players"



W. A. Patterson

who even now favor government ownership. Despite current expressions of "bushy brow," he said, plenty of future friction may be expected over the question of air rights.

Here are some of Patterson's other points and predictions.

Airline commerce in the United States will require 3,350 transport planes for all lines combined, as against 350 before the war. Thirty-two transport planes will be widely

used, but 54 100-passenger planes will be enough to handle post-war North Atlantic business.

The airlines can be expected to take over 80 percent of first-class passengers going 300 miles or more, if they reduce fares 25 to 30 percent below the recently lowered figure. Probably they will take over 60 first class seats and parcel paid for by their present rates in half, but reductions in express rates must be drastic if they are to carry material amounts of light, perishable cargo.

Surface lines have nothing to lose from air transport. Eventually the airlines may be handling 3,000,000-4,000,000 tons per year, leaving 127-133,000,000 for surface transport. Helicopters are a wonderful convenience, but hard to operate, and certainly they won't fill the shoes for years to come, if ever.

Patterson said he recently secured 3,000 new United employees, based on a temporary basis, that their jobs are permanent. Another 1,500 in service will get their jobs back after the war, he said, predicting that United's present personnel of 7,400 will be 8,500 immediately after the war and 11,000 within four years after the war ends.

Martin Wins Patent On Cargo Design

Two versions of high wing transport plane proposed by engineer.

The Glenn L. Martin Co. is studying a new type cargo plane many features of which have been pat-



Martin Loading: Diagram showing how proposed Martin cargo carrier would be loaded at airport.

AVIATION NEWS • August 16, 1945

eried in the name of Willem D. van Zelm of the company's engineering department. There is not in the air at this time any airplane designed exclusively to transport and handle cargo. Several such planes are in the post-war plans of airplane manufacturers.

Van Zelm's Cargo Ship.—The van Zelm cargo ship, for which designs have already been drawn, are powered with two and four engines respectively. Both have triplane landing gear, and their tail assemblies are rigged on twin extensions of the engine nacelles, so that the aft end of



Dear Closeup: Drawing of new type of fuselage, with cargo compartment door raised.

the fuselage opens for loading and discharge of freight.

Features.—The same hydraulic mechanisms used to raise the cargo door also extend a collapsible landing ramp, which is adjustable to either the ground or a platform. Adjustable jacks under the ramp take weight of freight during loading. A winch is provided for stowing cargo so that service will not depend upon field facilities. The plane always stands in a level or flight position due to the triplane outboard. Of course the structural members of the airplane have been arranged with freight loads in mind.

Cross weight of the two-engine plane is 65,000 lbs., which is larger than the 7500-lb. Mustang. The four-engine version has a gross weight of 80,000 lbs., useful load 36,970 lbs., of which 27,000 lbs. are cargo.

CAB Acts on Rate Of Continental

Issues show case order on proposed reduction.

Civil Aeronautics Board has ordered Continental Air Lines to show cause why its mail rates should not be reduced from 48.5 to 26.5 cents per airplane mile.

Base Rate.—The board found, tentatively, that the new rate should be effective on and after Aug. 15. It would be the base rate on a base percentage of 300 pounds, plus an exact percentage rate of .03 cent for each pound or fraction above the

base percentage, for any month in which average daily mileage is not over 4,972 miles.

Adjustments when average mileage exceeded that figure would be made in proportion to excess mileage.

Stanton Cites Post-War Need For Hangars and Service Facilities

Administrator says even our present airports lack necessary equipment for plane shelter and overhaul, and pilot comfort.

By MERLIN MEHL.

Administrator Charles I. Stanton of the Civil Aeronautics Administration has looked into the post-war crystal and sees a big building construction program for the nation's thousands of airports.

Critical Need for Housing & Service.—In a special statement on the peacetime picture after the war, he predicted that "a great future program of constructing housing and servicing facilities is indicated, because existing accommodations are strained to house and service the less than 15,000 civil airplanes now in use."

1,000 Airports Not Enough.—He describes the United States as better off than most people imagine in its airport facilities. It has, he says, nearly 5,000 civil airports, of enough to accommodate half a million planes. Many airports, however, are in places where there are few or no planes, "and there are too few air-

ports where there are a great many planes."

One-stop Service Vital.—In this connection, he points out that "an airport as simple as it is not just the prepared landing area. It includes hangars, service and shop facilities, weather and communication services and a place to eat, if not a place to sleep."

By way of statistics, Stanton recalls that only 5,688 towns in the United States have more than 1,000 population. Only 3,464 have 2,500 or more, and of these only, 3043 have 5,000 or more. And in the top bracket, there are only 1,077 cities of 10,000 or more.

An Airport for Every Town.—The administrator says it seems reasonable that all places of 1,000 or more should be accessible by air. Besides, today's larger cities will need more than one airport. Referring to Washington, he predicts that by 1950 it



NEWEST MUSTANG UNVEILED:

Army officials now permit publication of the first photographs of the new P-51 B, latest version of the North American Mustang. A 1,200 hp Rolls Royce Merlin replaces the Allison of corresponding power, while a two-stage supercharger guarantees superior performance at high altitudes. A four-blade propeller replaces the three-blade model. Army officers report the P-51B has "substantially better performance."

will need at least a second major air transport terminal "to help in carrying an estimated fourfold increase in the number of scheduled arrivals and departures."

Each aircraft, he added, will no doubt carry more than double the load of passengers, express and mail carried by the 1943 transport airplane.

Essential in Aviation Program.—Airports constitute one of four factors he finds necessary to the anticipated surge in aviation. The others are aircraft, aircraft and purchasing power. Stanton admits the last is "out of bounds for CAA people who are in no sense economists."

Post-war Models.—Raising his prediction on current designs coming through CAA, he believes peacetime production will see three types of all planes in the post-war market. One, he says, will be greatly improved models of civil aircraft now being flown, another an "armchair" model for the family trade, and the third the helicopter, which he sees as coming with "a vast field of utility closed to other types."

The supply of aircraft is an "assured factor," he says, forecasting as after-the-war pilot potential of approximately a million men at the outset.

Phase in Complete with Train Travel.—Greatly reduced rates and increased services, he maintains, he is sure for those who have no desire to fly except on pleasure, and will increase. Civil aircraft may be expected to put air transportation prices to a level with or even less than first class Pullman travel.

Latest Figures.—Porcizing out that 88 percent of flying now is by the military, the administrator offers a few current figures. He says an average of 1,378,814 plane movements per month has been reached on federal airways alone. Of these, the Washington central center recorded 54,813, and of an "enormous number" of cross-country and local flights not flying along in view, the Washington National Airport traffic control tower handles an average of 8,555 monthly.

In March, 1943, first month in which all 33 of CAA's control centers were in operation, the plane movement average, as he remembers, was about 100,000 or 200,000.

Post-war Predictions.—Stanton predicts that post-war growth in private flying will be "as phenomenal as the growth is unimaging after the last war," but expresses doubt that planes will carry heavy loads. "The freight vehicle service transport is non-existent,"



WAGO'S NEW CARGO PLANE:

Waco Aircraft Corp. shortly will begin production of a small number of the Wright-powered C-67, a twin-engine, wooden high-wing monoplane, designed as a cargo carrier. About 25 companies are competing to supply various parts and assemblies. Specially-adapted trucks will be necessary to transport these overseas sections to the Waco plant at Troy, Ohio, and special permits will be required from the MCC to operate some trailers with equipment nearly 17 ft. high.

The airplane will do its post-war job, he believes, by supplementing—not by supplanting—other forms of transportation, although "in its own proper field, the future of the plane, either as a form of bulk transport or as a pleasure craft, is personally boundless."

Army's Glider Show Convinces Officers

Night "smack" demonstrates power of airborne troops.

Army Air Force officials committed themselves to an aggressive combat glider policy in a two-day and night demonstration for the press and military observers at Maxwell Air Base, N. C., Aug. 4 and 5.

Questioned as Tactical Weapons.—For months the Army has been uncertain whether to exploit the glider as a major tactical weapon.

The German glider attack on Crete was successful but losses were heavy. The British and American glider operations in Sicily have disclosed their lack of experience, although they were highly effective. Not only the public, but Gen. H. H. Arnold, Chief of the Air Force, himself had been sceptical on glider value.

Show Tells Gen. Arnold.—The demonstration at Maxwell Field was as much for Gen. Arnold as it was for the press and it apparently sold him. Months ago he visited Max-

son Field and told the Command it would have to show him some killing power and that it would have to learn to attack at night or powerless flight might get the guns. All indications are now that direct forces of glider infantry will be behind the enemy at the right time.

Douglas C-47 and C-53 low plane releases 12 CGAs. 15-plane glider, which were put down in a small obstructed area. Troops rushed out and annihilated attack all in ten minutes. One craft released a jeep.

Night Attack.—In the night demonstration six fully-equipped CGAs were released at a distance and at altitude. They came into a wooded area guided only by a ground lamp placed by "Fifth Columnists." Approvals, landing, and attack were executed in silence. Personnel left by day and night were excellent and glider cargo morale has gone from low to high.

Army Champions Glider.—The Army appears impressed by criticism of the CGA. The ship lacks some refinements and is noisy inside, but it handles well, carries a good load, has a flat glide path, is rugged and gives its crew good protection in case of landing. It has exposed some training facilities, but none in troop maneuvers. The St. Louis accident is not held against this type. The Army, in addition, sees some developments on paper and in the air which cannot be mentioned but which are impressive.

Post-War Reserves Urged for Industry

Aircraft executives stress need for forward-looking views.

The need for adequate reserves to cushion the aircraft industry against a sudden halt in hostilities and the subsequent termination of contracts is being emphasized by industry executives in connection with studies now being made by the government on the possible effects of war's end on an industry generally.

The aircraft industry is in general agreement with the views expressed on this subject by Francis A. Gallery, financial vice-president of Consolidated Vultee Aircraft, who told the House Naval Affairs Committee of the need for reserves exempted from renegotiations.

Protection for Contractors—Gallery recommended that contract negotiations for the aircraft industry be made on profits remaining after taxes and that the tax law should provide for necessary reserves for post-war readjustment. At the same time, he suggested that termination of war contracts be spread out in such a way as to provide protection for war contractors and in turn for the government.

Post-War Refund—It is Gallery's contention that the setting aside of

a post-war refund of the excess profits tax is not adequate to cushion the efforts of the end of war production, the amount being too small and, further, it would not be immediately available.

A sudden halt in the production of aircraft, Gallery said, would result in immediate confusion in communities in which aircraft plants are located, and steps should be taken now to avert this situation.

Study Foreign Ships

U. S. Army plying other nations' warplanes through their peac.

One of Britain's four-engine Avro Lancaster bombers is the newest addition to a wide variety of foreign warplanes being scrutinized by technical officers of the Army Air Force.

Tested and Compared—A steady procession of craft which have been tested and compared with American types includes the Spitfire and Hurricane fighters, a Boulton-Paul Defiant night fighter, a Bristol Beaufighter, several of the high-speed wooden de Havilland Mosquito fighter-bombers, and one of Britain's giant Harrow troop gliders, larger than any U. S. glider now in production.

Captured Enemy Planes Rebuilt—Several captured enemy planes also



AAF Tests British GliderThe Army has received a big British Harrow troop-carrying glider for tests in this country. It carries from 25 to 35 men and is larger than any model now produced in the U. S., although we shall probably have a 35-place prototype soon. This photo shows a Harrow drifting to a landing in England.

have undergone tests by U. S. engineers. While many have been in fragmentary condition, several were rebuilt and returned to flying status. Two Messerschmitt 109's have been reassembled. Others brought in were a Junkers 88, a Zivko Zivko fighter-bomber, a Zero, and parts of others.

Pogue Impressed By Airlines' Job

CAB Chairman returns from western tour and 25 speeches.

Air priorities are no baguette to L. Welch Pogue. He travels as much as a man can who happens to be chairman of the Civil Aeronautics Board. Pogue is back at his desk after a trip on which he visited aircraft factories, modification centers, airline communication centers, studied flight operations and made 25 speeches. He describes it as a "quite exhilarating tour."

Without Priorities—With one exception, he traveled the entire distance without plane priorities, and kept to his schedule. He used the flights least popular with priority passengers. The exception occurred when his itinerary was interrupted by a hurried return to Washington for a confidential conference with Mr. Roosevelt. There he used priorities. One doesn't keep the President waiting.

The chairman thought he would be "bumped" several times—that his lack of priority would leave him stranded when his plane took off. But he was on hand at take-off time

and always succeeded in getting a seat. A few times the priority passenger in whom he would have sacrificed didn't appear, and once or twice a prospective passenger changed his mind and decided he couldn't go until later.

Old-Hoar Flights—Pogue starts modestly. He may have been recognized occasionally and perhaps that had something to do with his always getting a seat. But he insists he did nothing voluntarily to obtain preference. The trick to air travel without priorities, he says, is to see it, to go on flights that leave at odd hours—very early and avoid the rush, as it were.

His journey occupied him from July 18 to August 8 and took him to Rochester, Minn., Chicago, New York, San Francisco, Los Angeles, Fort Worth, Dallas, Oklahoma City and Shawnee, Okla., and St. Louis. On the planes, he sometimes sat up front with the pilots.

49% Less Expenses—Pogue was frankly impressed. He told associates after his return that while he knew the airlines were operating on tremendous schedules with 48 percent less equipment than they had before the war, and riding on them he has an even deeper feeling of their contribution to the war effort.

Old Complaints—All over the west he heard a complaint that's an old story by this time. "They need more planes," he said, "the same as everybody else."

One thing he found of particular interest. That was a general reaction among management and pilots that "although there is a great concern of military operations to the military, the military people are doing their best to conform to safety regulations."

CAA Films Show Traffic Problems

Control operators shown tips on flying difficulties.

Colored films for use in training air traffic control workers for the Civil Aeronautics Administration are being produced by the CAA, following a preview showing at the Administration's recent policy-making conference on air traffic control and communication at Chicago.

Other Training Films Planned—Pipes call also for development of about 50 script films for training classes on meteorology, radio aids to air navigation, and related subjects.

One of the first of the series is en-



RESEARCH PRESSED ON CATERPILLAR GEAR:

Research is continuing rapidly on the new caterpillar landing gear developed by the AAF, Firestone Tire & Rubber Co., and DeSoto Equipment Co. Photo shows the first installation, on a Douglas A-20. Industry experts say the device can and probably will be used reasonably, and adaptable to fighters as well as heavier craft. It is the original development, Firestone said, the gear has been landed at 120 mph, and has been successful on soft ground, deep sand, and on rough terrain. With the same amount of rubber that goes into a regular landing tire, the new tread gives the plane from four to eight times the area of contact on the ground.

titled "A Typical Flight," and depicts, through pictures and sound, the direction of a plane in safe flight from before take-off at Washington National Airport to after its landing at La Guardia Field, New York.

War Complicates Air Safety Story

Difficulties arise in view of ATC-airline relationships.

However few accidents the airlines may have at will be difficult for them to give a true and reassuring picture to the public, in the opinion of sources connected with the problem.

Wrong Impressions—One difficulty is that many reports due the impression that military and civil accidents are somehow associated. Fatalities incident to American Airlines' crash at Louisville were lumped in with Army fatalities to make a total of 50 within a day or two. Such impressions are hard to correct in view of the relationship between the Air Transport Command and the airline system.

Airline Statistics—Another problem is the dissemination of airline statistics. The Air Transport Association issued a statement intended to reassure the public after the American Airlines crash. Informed persons observed that the statement merely dealt in generalities.

What to Tell the Public?—But ATA was facing at least two tough propositions. ATA cannot very well say the airlines are doing fine in the circumstances, and then tell what the circumstances are. Telling the public that planes still hit in the private line is about 1,000 miles per day each might not help at all. No matter how excellent the maintenance, how adequate the supply of parts, people might mistrust equipment that is worked so hard. There is nothing the operators can do about it except get more planes, and that's up to the Army and other high officials in Washington.

Toothy Topic—The other tough proposition is that, though the airline safety record is far better than that of the Army, the operators cannot use the fact to their advantage, because the Army is toothy on that subject and presumably would not approve release of such material.

At present, the lines are nothing much to do but keep quiet and do their best.

Ford Expands

Ford Motor Company's Highland Park plant has started production of parts for Pratt and Whitney aircraft engines.

About 80 workers, half of them women, have started work on two shafts turning out propeller-shaft parts and about the same number are working on shafts. Production of gears is expected to start later this month.

A peak employment of 8,000 is expected by mid-October. Ford is operating a large glider plant as well as its B-24 lines.



CAA TRAINS TRAFFIC OPERATORS:

Students at an airport traffic control school at Atlanta, operated by Civil Aeronautics Administration, use a model airport to "bring in" a model plane (hanging from strap above one on right). Standard approach patterns are projected under the watchful eye of an instructor.

NWLB Adopts Public Hearing Plan; Rules on Solar, Douglas Cases

DPC authorizes increases in plant contracts with Edo Aircraft and Packard Motor Car Co.

National War Labor Board announced that hereafter all its decisions will be presented at public hearings, concerning which both parties will be given adequate advance notice. The failure of either party to appear shall not invalidate the decision made by the Board of Conciliation.

Wage Increases—By an amendment to General Order No. 7, the Board is now authorized to approve wage or salary increases made in compliance with state minimum wage acts and orders when such increases do not result in rates above \$90 an hour.

Solar—Solar Aircraft Co. has been ordered by the board to hold elections within 30 days of July 31 for protection and maintenance employees to vote for or against representation by IAM, and for welding department employees to vote for IAM, or United Aircraft Workers of America, or for neither.

Douglas—The Board has amended the July 8 Direction of Election of Douglas Aircraft Co., Inc., at El Segundo, Calif., to exclude from the appropriate bargaining unit toolmakers and aircraft leaders.

Freddie and American Prop.—Petition filed by CIO for representation of employees at Freddie Aircraft Industries, Inc., and by AFL for representation of polishers and buffing at American Propeller Corp., Toledo, Ohio, have been dismissed by NWLB.

The Board has ruled that the International Brotherhood of Electrical Workers, AFL, will represent bargaining maintenance electricians at Douglas Aircraft Co., Inc.

Brewster—NWLB has approved an agreement between Brewster Aeronautical Corp., and the UAW-CIO providing for an increased vacation schedule for workers at three plants located at Leona Island City, N. Y., Newark, N. J., and Johnstown, Pa. The new schedule provides for 30 hours vacation with pay for six or more months of service, one week with pay for one year of service and two weeks with pay for two or more years.

Bendix—A seven percent wage in-

crease for 5,600 radio workers in the Bendix Aviation Corp. plant in Baltimore has been approved by the regional NWLB. The increase followed a reduction in working hours from eight to seven and one-half with adoption of an around-the-clock production program.

Bell—NWLB has granted a standard voluntary maintenance of membership provision and a check-off clause to the United Automobile Workers, CIO, representing approximately 30,000 workers at the Bell Aircraft Corp., Buffalo, N. Y. The union security clause provides for a 15 day period after August 4 in which members may withdraw from the union if they do not wish to remain members for the duration of the contract.

Abstraction—The contract was amended to provide for arbitration as the final step in settlement of disputes within the plant under the contract. The board also ruled that the regular work week at the plant should not exceed 40 hours, nor the regular work day, eight hours, with time and a half for overtime. The question of extension of the bargaining unit to include inspectors, tool-makers, production control personnel, guards and watchmen was referred back to the parties for negotiation with the direction to refer it to NWLB if not resolved by collective bargaining within 10 days.

The question of wages was postponed until the situation could be thoroughly investigated and the request by the union for a more liberal vacation schedule was denied.

DPC authorizes an increase in contract with Edo Aircraft Corp. to provide \$100,000-worth of additional plant facilities in New York, resulting in an overall commitment of about \$1,375,000.

The Defense Plant Corp. also announced during the week an increase in contract with Packard Motor Car Co. to provide additional equipment at a plant in Michigan at a cost of approximately \$2,000,000, resulting in an overall commitment of approximately \$40,000,000.

Edith Juel, for two years a member of TWA's public relations staff, has been promoted to cooperation advertising manager. In this capacity she will be in charge of all cooperative advertising projects for the company, including promotion and display help.

Aircraft Accessories Corp. recently launched an extensive advertising campaign in business and trade publications. A four-color ad headed "Sugar and Spice" has appeared in several magazines. Current business-paper advertising of the firm is identified by a series of three-page ads printed in black and black and white. Aircraft Accessories war work under the caption, "Bismarcks for Safety."

The advertising account of Chrysler Division of Chrysler Corp., Detroit, will be handled by McCann-Erickson, Inc. Ads will appear in national business and automotive business publications.

Wagner Flynn, a new publication compiled by the writers, artists, poets, and largely cartoon-illustrated, is published by the service division of Lockheed Aircraft Corp., Burbank, Calif.

Northwest Airlines has begun publication of *Northwest Air*, an aerial digest newspaper, in sections, areas furnished by the Reno Reporter and will be released simultaneously at all the airline's coast-to-coast points in the United States and Canada. First issue will instruct passengers on flight from Boston to Canada.

The manufacturing divisions of Curtiss Wright Corp. are running in national newspapers and radio ads illustrated with photographs of Army and Navy aircraft equipped with Curtiss Electric propellers.

Part of Hayes Manufacturing Corporation's promotional program is endorsement of the organization of the "Seymour Club," in which any person making an emergency jump in a Hayes chute is entitled to belong.

Glider Defect

Right strut fails, wing breaks off, investigators report.

Two of a group of agencies investigating the St. Louis glider crash that killed ten men August 4 have reported that a defective part in a strut to the plane's right wing gave way, allowing the wing to break from the fuselage. The report was made by the War Department and House military committee's special investigators. Two inspectors were dismissed at least temporarily

THE AIR WAR

COMMENTARY

4 Types of U. S. Warplanes Helping Russians Smash Nazis

Cobra Havoc, Mitchell and C-47 praised by Red officers, who have won control over Luftwaffe along eastern battle line.

THE Wehrmacht has shot its bolt on the eastern front. From now on anything can happen.

The enormous scale of the Russian fighting has shown to the world a very important reason for the failure of the Germans to capture Kursk, which bogged down after ten days and which soon after went into disastrous reverse. Unlike earlier campaigns the Luftwaffe was simply not equal to the task of gaining the air superiority which is one key to success in any ground action.

Size of Nazi Air Force—The best estimates indicate an operating maximum of not over 2,500 German planes on the entire Russian front, from around Murmansk to the Caucasus, or a total of 5,000 in all, allowing 50 percent under maintenance and in reserve as the apt Soviet 50 percent of these are frontline fighters, including the latest Messerschmitt 109's and Focke-Wulf 107's, and the older Heinkel 111's; also twin-engine Me-109 and improved Me-109 fighter-bombers.

Not Enough to Do the Job—Soviet units include a fair number of older 20-37 planes and a more heavily armed and armored version of this ship, now on the way out on all other fronts, and large numbers of the greatly improved two-engine dive or level bomber, Ju-88. In special version of this is one of the most deadly night fighters in the world. Other bombers include the Dornier 217 and Heinkel 111. Ground cooperation planes like the heavily armed Heinkel 122, and transports include the old Ju-52 and the big new Ju-80. It is doubtful if more than 1,500 to 1,500 planes could be concentrated for the Kursk offensive. Events proved that this was not enough to do the job.

Russian Havoc Plan—During the working out of the Russian master plan of (1) defense in depth, (2) weakening the enemy by incessant combat, (3) realistic backing for strategic reserves, and then (4) striking hard when the enemy thrust has lost its punch, the Red flyers used fighters and improved SS and DB bombers in close cooperation with the Army.

It is only within the past few months that they have been using their bombers strategically in long range raids.



Somewhere in Iraq: American warplanes are about on the ground and is the one being tested before delivery to Russia. On the ground are Bell Aircrafts and a

Douglas A-20 Havoc. "Large numbers" of four types of U. S. planes are being delivered monthly to Russia, says newspaper, the New York air war correspondent.

More U. S. Planes in Fight—Along with these Russian planes an overwhelming total of American equipment has been throwing its weight around, including at least four well-known types, the Bell P-39 Airacobra cannon-carrying fighter, the Douglas A-20 Havoc, and North American B-25 Mitchell twin-engine bombers, and the Douglas C-47 Skytrain cargo-transport. Large numbers of these are being delivered each month at a big Army base near the head of the Persian Gulf, and across the front by Russian flyers across Iran.

Factory-as-Front Delivery—More recently, however, a majority of the planes, including the single-engine Airacobra equipped with drop-tank, are being ferried direct to a key point in Russia and from there flown to the southern, central or northern part of the long front. Numbers and exact routes are of course restricted information, but when it can be told it promises to be one of the outstanding stories of the war. It may be indicated, however, that timely aid in supplying these planes has been far more responsible for enabling the Soviet Air Force to keep the upper hand over the Luftwaffe than is generally realized.

"Airacobra" in Russia—According to all reports, Russians are enthusiastic about all four of the U. S. types mentioned. The Airacobra was the first to arrive in quantity, the earliest reports coming back in the late spring of 1942. It is generally understood that something like one-half of Bell's substantial production finds its way to Russia, and that considerable interest is being shown in the improved model. Returning correspondents tell of the splendidly organized defensive strikes



"FORTRESS" BOMB LOAD NOSE 10 TONS

First close-up photo permitted released of an internal rack which boost the maximum bomb load of the Boeing Flying Fortress to 10 tons. Note the racks with fork-like fingers on the bottom of the fuselage near the wheels. The racks support the bomb bay for shorter range drops.

equipped with "Cobras" which ring Moscow and other important Soviet cities, at the terrific pace the P-38s played in turning the tide at Stalingrad on strafing planes and tank destroyers, and of their great success in aerial combat against the best fighters the Nazis can throw into the air.

Filitsky Reports High Score—Air Marshal Filitsky told of a Soviet Air Force Gorda group which knocked down 33 enemy planes in three months, losing but 3 aircraft. Other even more impressive records have come in "The world's champion single fighter

plane of the entire war to date may well be Captain A. Pokushkin's "veteran" P-38 which has 31 stars awarded on its fuselage, each representing a German plane shot down.

More of these U. S. planes, and other types which will be seen on the way, may well add a decisive push to the first Russian summer offensive.

AIR WAR REVIEW: In the Pacific, the fall of Manila ended a 35-day jungle battle which put us 293 air miles from Bougainville Island. Our air forces, too, on New Guinea have



HUDSON HITS OCEAN, BOUNCES OFF

This British Information Services photo shows another reason why the Lockheed Hudson has been dubbed "Boomerang." The plane, flying low in a thick haze, struck the sea, shattered violently, and bounced off the water. The port engine cut out and the wireless operator sat as 200 ft but the pilot flew her back despite damage shocks.

showed the long front from the Moscow south with particular attention to New Britain and the New Guinea coast from Madang to Salamaua.

In Burma, both our 10th Air Force and the RAF conducted incessant harassing operations, despite the monsoon's burping.

Oil Fields Hard Hit—The devastating and far-reaching effects of the North Air Force raid on the Ploesti oil fields is becoming more apparent with the state of reconnaissance. Although our losses were high—more than 20 percent of about 275 planes—it must be remembered that Ploesti supplies approximately one-third of German petroleum needs and most military men think it was worth it.

Naah Warfare Breaking—While great emphasis is being placed upon the damage our bombers are wreaking on Axis industry, the effect of the constant pounding on the morale of the enemy people should not be overlooked. This is pointed up by German radio reports that more than 1,344,000 women and children will evacuate Berlin, Hamburg lies dead.

The effect of Italian bombings, outside of production stoppage, is, well known, even with the tight Italian censorship. These raids are the price the Italian people must pay for their stalling the peace move and all indications are they will find it too high.

A major lesson learned by American airmen in combat is that of flying tight formations. Formerly it was believed that a formation should loosen up to cut down danger from flak. Air War over Europe taught that the formations contained tight were not tight enough, and staggered attacks are now taught to fly heavy bombers wing-tip to wing-tip.

NAVIGATION

Super-Secrecy

Charles I. Stanton, Civil Aeronautics Administrator, was discussing the "extremely confidential" nature of work being done by designers in the light plane field.

The president of one light plane company," he said, "by way of illustration, 'has made his post-war plans so secret that he himself doesn't know what his designers are up to.'"

AIRCRAFT PRODUCTION

Criticism Focuses on Aircraft Despite Steady Rise in Output

Widely publicized reports say total plane production is down, although July performance exceeded June.

By SCOTT HERSHEY

Aircraft production, which has been the glamour girl of war industries for many months, has suddenly been turned upon by some of its admirers and has been given what a good many executives, in the government and out, believe is an unwarranted going over.

Definitely an Upgrade—The criticism directed at the industry came at a time when officials were concerned about all war production, but for some unexplained reason, aircraft was singled out. Even while July production was catching and passing June production, there were cries that aircraft production was off a matter of fact it was not off. It wasn't as high as everybody—including the industry—would like to have seen it, but it was definitely on the upgrade.

Highest Month in History—In the midst of the criticism, a startling thing happened. Breaking precedent, WPA released July production figures the first week in August. Ordinarily a month passes before such figures are released. The figures were above June production. It was above May production. It was the highest monthly aircraft production in history. The critics cried that "only" 1,733 airplanes were produced in July. This fact proved unjustified the men and women who are making our warplanes and who have been misled in the recent past as having performed a production miracle.

Troop Carriers—One official said no monthly figures, including those for July, showed the number of unpowered troop carriers built by the industry. If they had, it would make the total even more impressive. He estimated the almost 50 many man-hour and so much productive effort was going into trainers, single and two-engine, and into light plane transports, as is going into unpowered ships.

The fact that fighters have no engines or propellers must be dis-

counted in view of the considerable number of engines and propellers exported each month for use on the planes of our Allies.

Bomber Output Up 13%—Airplane production as well as unit production was up in July and adding to this total was the output of four-engine bombers. This production was up 13 percent in units over June and even at the Boeing plant in Seattle, local by monoplane difficulties, production was up and set down from June figures.

Schedules Revised Five Times—The point was made in some quarters that even though total production was up in July, it did not meet schedules. There have been five months when set schedules have been met. The so-called working or realistic schedule, as against the public consumption schedule, has been revised five times.

Question Quotas—WPA officials said the July schedule called for at least 1,666 airplanes, and called for at least 10,900 a month by the end of the year. Most production experts estimated some time ago that the July production would not reach 2,000—and that was before the latest "production plateau" was reached. These same experts do not believe production will reach 18,000 in December, but it may approach it.

Leveling Off Inevitable—Men close to the production picture emphasize that a leveling off in the production line is inevitable. They express no particular concern that the spectacular gains made by the industry since Pearl Harbor did not continue indefinitely and in fact did not expect them to continue. In addition, they pointed out, failure to meet schedules in the past have resulted in no great concern so long as production continued at a climb.

Peak production probably will be reached about the middle of next year and the climb toward that peak is bound to be a gradual one. This peak will be reached at that time

only if all goes well and that means solving the manpower problem.

Convair Plant Exceeds Schedule

Laboratory production at Tucson has broken records on heavier quotas.

At a time when production is causing national discussion, the Ford Worth plant of Consolidated Vultee Aircraft Corp., exceeded its July schedule, the heaviest yet attained.

All-time High—After receiving congratulations from T. P. Wright, director of the Aircraft Resources Control Office at Washington, Division Manager George J. Newman said that workers have turned out 100 percent on schedule for ten months and, in July went over the top by producing more Liberators than was believed possible.



NEW RIVET GUN:

A rapid heating expansion rivet gun has been perfected by Goodspeed Aircraft Corp., Akron, Ohio, which says the gun is light, portable, unexpensive and easy to handle. Its principle involves the passing of a hot solid and high current through two conducting leads terminating in a high resistance metal tip. Resistance of the tip causes high temperatures over its restricted area. Operation of the gun, it was explained, is simple. The riveter holds the rivet in its place with the gun and squeezes the trigger. This causes the current causing the tip to heat about instantly. When the rivet is deformed, the trigger is released and the operation is repeated over the next rivet. High induction results in a speedy cooling of the air.

U. S. and Industry Studying Incentive Wages, Labor Priorities

Draft deferment move to help, but military inductions still represent small part of total separations.

Incentive wages plus labor priorities are now under consideration by high government officials attempting to break the manpower bottleneck which has replaced the materials bottleneck as the aircraft industry's most critical problem.

► **Public Pressure Road**—Executives of the industry have seen the manpower problem for this industry, and have been urging action to meet it. The draft deferment ordered for West Coast aircraft plants may ease the situation slightly, particularly as far as key personnel and skilled craftsmen are concerned, but the fact remains that job separations due to military inductions represent a small part of the workers leaving the industry.

► **Ryans and Banach Order Surveys**—The Office of War Mobilization's director, James F. Ryan, has called in his special adviser, Bernard M. Banach, on the problem and various government agencies concerned are making surveys, particularly on the Pacific Coast where the problem appears to be most acute at the moment.

► **National Compulsory Service?**—The subject of national compulsory service is again being talked about in some government circles. Although there is strong opposition to such a move and even a recommendation for it from officials dealing with the manpower problem would probably be a last-need proposition.

► **Incentive Wage Plans**—Some manufacturers have shown a reluctance to institute incentive wage plans, but it is believed that most objections can be overcome. In a general way, it calls for specifying incentive wage increases, extending throughout the entire plant, to reward specified production increases. Beech Aircraft has had good results from a modification of this plan and another proposal similar to the Beech plan has been filed with the National War Labor Board for Grumman. Both plans provide augmented wages (inflationary effects).

► **Labor Priorities Proposal**—The labor priorities proposal, which has been tried in experimental ways. Under proposals now being studied, war in-

dustries of greatest importance to the production program would have first call on any available labor in any specified area. That persons seeking work through the U.S. Employment Service would automatically be assigned to the priority industry in the area concerned.

► **Exit Interviews?**—Officials also are studying the effectiveness of various aircraft companies in an effort to keep workers in the plants. Military separations are easily checked and obvious, and are a small percentage of the total. There are many others.

Some workers leave aircraft plants for other war plants due to higher wages. Others leave because of unsatisfactory housing or transportation facilities or both.

► **Back to the Farm**—Large numbers leave to go back to the farm. Agricultural workers are less likely to be drafted than any others. The draft deferment for Pacific Coast aircraft workers may stop this exodus. Other workers from farms and small towns simply do not like life in an industrial center.

► **Pre-Pool Harbor Dredging**—Selective Service's announcement that Pre-Pool Harbor fathers will be drafted was seen in many quarters as an incentive for men in this classification to get into an essential industry, which also may be of help to the aircraft manufacturers.

► **Why Women Quit Work**—Women leaving jobs do so in some cases to follow their husbands in the armed services who have been transferred to new posts within the country. A few go into women's branches of the armed services. Others, particularly during the school vacation, go home to take care of their children. In other instances, the men of the family are making good wages and women decide there is no further need for them to work from an economic angle.

Whether incentive wage proposals will entirely meet these problems remains to be seen. Many officials in Washington are of the opinion it will aid greatly.

► **Advancing Use of Skilled Labor**—Management may expect some suggestion from government on utilization of skilled labor. There is a feeling in some government circles

that workers are not always being used at their highest skills. Management, however, feels that it has been working on the manpower situation, as it affects them directly, longer than some government officials and contend that they have utilized the skill of their workers to the best possible advantage under the circumstances.

Prop Blade Output Up

Three models of hollow mast type in production, compared with '43.

Current propeller blade production by the American Propeller Corp., subsidiary of Aviation Corp., more than doubled in the first six months of this year over the production in the last six months of 1942. Three models of the hollow steel type propeller blade manufactured at Toledo are now in production as compared to a single model being made in May, 1942.

American propellers are used in the Martin Marauder B-26 bomber, the Republic P-47 Thunderbolt fighter and the Bell Airacobra P-39 fighter.

Hamilton Extends Licensing Rights

Barrington, Frigidare and Nash now augment production.

United Aircraft's home Hamilton Standard propeller plant at East Hartford is now concentrating further on new and advanced propellers, as licensing for regular models is extended to other concerns.

► **Possibilities to Propellers**—Ble for 18 years, one of the world's largest silk weaving sheds, the former Royal Weaving Co. at Darlington, R. I. is now a Hamilton Standard production unit. Two other former textile mills located at Westerly, R. I. and Norwalk, Conn. already are at work building propellers.

In addition, Barrington, Rand, Frigidare and Nash-Kayashin have been licensed to build Hamilton Standard propellers.

Bolts Power-Driven

Ranger develops new time-saving method Day's work on 1 hour

The development of the first practical method of driving aircraft engine stud bolts with power has been

announced by Harold H. Radabaugh, vice-president of Fairchild Engine and Airplane Corp. and general manager of the Ranger Aircraft Engines division.

► **Transcending Savings Possible**—Radabaugh says this development can be applied to all aircraft engine production lines with a saving of millions of dollars and thousands of man-hours and he has offered it to all aircraft engine manufacturers.

► **Remedy Bottle-necks**—Power driving of stud bolts, he says, has broken a bottleneck at Ranger where formerly, as elsewhere in the industry, they were driven by hand. The power machinery used at Ranger was designed by Ranger production engineers, Phil Kilham and Frank Lucas, in collaboration with the Chicago Pneumatic Tool Company and Reed-Craft Associated.

► **Day's Work Cut to One Hour**—Ranger officials say that today one man can drive in one hour all the studs he formerly drove in a full day with hand tools, that he can do the job with less spoilage and closer adherence to tolerances. In addition, whereas the job formerly required considerable physical strength, it can now be done just as handily by women.

Grumman Pay Plan Filed With NWLB

Adoption of Beech proposal covers all workers.

A newly-developed wage incentive plan for Grumman Aircraft Corp. has been filed with the National War Labor Board for approval.

► **Pay Increase Basis**—The plan, an adoption of the Beech Efficiency Incentive Plan now operating successfully at Beech Aircraft, establishes a base of a pound of airplane per pay-hour production by Grumman employees, based on the output of the preceding quarter. For every increase in percentage in succeeding quarters, employees would receive an increase in pay of one-half of the percentage increase in volume production during the quarter.

► **All Plant Workers Benefit**—The proposed plan covers the entire plant, with both productive and non-productive employees participating. Those with a base pay of \$5,000 to \$7,500 would have a smaller participation, while those with pay above \$7,500 would be excluded. The plan was developed by Harry Kieglis, Grumman counsel, and

Henry L. Knight, Washington counsel for Beech, explained that a safeguard against inflationary effects was provided in the operation of CMP which puts a lid over the program. The plan has the approval of the Navy and of WPA's Management Consultant Division.

Aeronca Wins Army-Navy "E"

Five light plane firms to get award held ceremony on "E" anniversary.

Aeronca Aircraft Corp., Middletown, Ohio, is the first light plane company to receive the Army-Navy "E" Award.

Presentation ceremonies were held on the company grounds on August 13, which was the first anniversary of the presentation of all Army-Navy production awards. ► **Nearly 2,000 Awards**—The Army and Navy announced that a total of 1,818 plants and projects have been granted the "E" for excellence in production of war materials since the program was inaugurated twelve months ago.

While no official competition has been made of the total number of plants, both prime and subcontractors, producing war materials, it is estimated that less than two and one-half percent of the eligible plants have received the award to date.



FIRST CANADIAN-BUILT LANCASTER

Here's the first Canadian-built, four-engine Lancaster bomber, christened "The Ruhr Express" at the government-owned aircraft plant of Victory Aircraft, Ltd., and immediately flown to England by the crew shown above.

Flying Tank-Car Service Sought; Applications Pour in on CAB

Truck and bus operators, and airlines file petitions for regular and uncheduled services over feeder and trunk routes.

Transportation by air of liquid commodities in 3,500-gal. lots is contemplated in an application filed with the Civil Aeronautics Board by Coastal Tank Lines of York, Pa. The company now carries petroleum products in tank trucks in a dozen eastern and southern states.

The proposed operations would start on a non-scheduled basis for "any commercial, military or emergency requirement," the application stated, not to supplement the firm's existing operations. The company stated it has studied the development of a compartment tank with necessary pumping devices, designed for air transport. It proposes to operate cargo aircraft with a proven ability to transport pay loads of about 34,000 lb., or 3,500 gal.

The application was one of nearly a score filed with CAB. A summary follows:

Interstate Terminal Lines, Omaha, Neb. filed a petition for scheduled service between Omaha and Lincoln, Neb., and between Omaha and St. Louis, Mo. The company also filed a petition for scheduled service between Omaha and St. Louis, Mo. The company also filed a petition for scheduled service between Omaha and St. Louis, Mo.



TWA-ATC CREW SCHOOL.

Using a modified Lockheed Lodestar, with active windows for observation purposes, this crew school is shown ready to start a training flight. Full complement includes a TWA captain and first officer, radio operator and radio instructor, and five student navigators. This is one of TWA's contract services for the Air Transport Command.

Grand Rapids, and between New York and Newark and Chicago, scheduled via Chicago City, Ill., and Detroit, Mich. Pittsburgh, Akron, Cleveland and Toledo.

Airway Service Company, Pittsburgh, Pa. filed a petition for scheduled service between Pittsburgh and Erie, Pa., and between Pittsburgh and Erie, Pa. The company also filed a petition for scheduled service between Pittsburgh and Erie, Pa.

Delco Airway, Inc., Hammondsport, N.Y. filed a petition for scheduled service between Hammondsport and Elmira, N.Y., and between Hammondsport and Elmira, N.Y.

Albany Air Lines, Inc., New York City filed a petition for scheduled service between Albany and New York City, and between Albany and New York City.

John C. Van Ness, Kingston, N.Y. filed a petition for scheduled service between Kingston and New York City, and between Kingston and New York City.

Lehigh-Valley Airway, Inc., Allentown, Pa. filed a petition for scheduled service between Allentown and New York City, and between Allentown and New York City.

Coastal Tank Lines, Inc., York, Pa. filed a petition for scheduled service between York and Philadelphia, and between York and Philadelphia.

Spence Air Freight Lines, Inc., Midvale, N.J. filed a petition for scheduled service between Midvale and New York City, and between Midvale and New York City.

Western Airlines, Inc., East Haven, Conn. filed a petition for scheduled service between East Haven and New York City, and between East Haven and New York City.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Donald Airways, Inc., Dallas, Tex. filed a petition for scheduled service between Dallas and New York City, and between Dallas and New York City.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Polish Transportation Co., St. Louis filed a petition for scheduled service between St. Louis and New York City, and between St. Louis and New York City.

Leiforo Brothers, Phoenix, Ariz. filed a petition for scheduled service between Phoenix and Los Angeles, and between Phoenix and Los Angeles.

and in private. They include: Niagara Falls, N.Y.; Buffalo, N.Y.; Rochester, N.Y.; Albany, N.Y.; Syracuse, N.Y.; and Binghamton, N.Y.

American Airlines, New York City filed a petition for scheduled service between New York City and Washington, D.C., and between New York City and Washington, D.C.

Key Petroleum Flying Service, Anchorage, Alaska filed a petition for scheduled service between Anchorage and Fairbanks, Alaska.

Trans Air Lines, Chicago Station filed a petition for scheduled service between Chicago and New York City, and between Chicago and New York City.

Albany Air Lines, Inc., New York City filed a petition for scheduled service between Albany and New York City, and between Albany and New York City.

John C. Van Ness, Kingston, N.Y. filed a petition for scheduled service between Kingston and New York City, and between Kingston and New York City.

Lehigh-Valley Airway, Inc., Allentown, Pa. filed a petition for scheduled service between Allentown and New York City, and between Allentown and New York City.

Coastal Tank Lines, Inc., York, Pa. filed a petition for scheduled service between York and Philadelphia, and between York and Philadelphia.

Spence Air Freight Lines, Inc., Midvale, N.J. filed a petition for scheduled service between Midvale and New York City, and between Midvale and New York City.

Western Airlines, Inc., East Haven, Conn. filed a petition for scheduled service between East Haven and New York City, and between East Haven and New York City.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Donald Airways, Inc., Dallas, Tex. filed a petition for scheduled service between Dallas and New York City, and between Dallas and New York City.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Polish Transportation Co., St. Louis filed a petition for scheduled service between St. Louis and New York City, and between St. Louis and New York City.

Leiforo Brothers, Phoenix, Ariz. filed a petition for scheduled service between Phoenix and Los Angeles, and between Phoenix and Los Angeles.

Key Petroleum Flying Service, Anchorage, Alaska filed a petition for scheduled service between Anchorage and Fairbanks, Alaska.



BRITON ON INSPECTION TRIP:

Lord Darlington (center), of the British Ministry of Aircraft Production, London, as he began a recent inspection tour of air facilities in this country. With him are J. H. Carmichael (left) and J. J. O'Donovan, Pennsylvania-Central Airlines vice-presidents. O'Donovan is recovering from an eye infection.

June. Passenger passenger rates were up 55-58 percent.

► **123% Increase**—Increases also were reported by the Erie and Erie Express, in comparison of the two lines. In mail, the boat was more than 125 percent, mail pound rates down last June were 162,962, 461, where in June a year ago they had been 81,667,851. Gross passenger rates increased 94.68 percent to 439,716 last June.

Express pound rates increased 53.3 percent from 35,217,796 in June, '62, to 53,933,481 in June, '63.

Sanchar Airlines, Amer-Six, two scheduled air transportation of general cargo and mail, including air express, after a year of operation, the company is now in a position to handle a large volume of business. The company is now in a position to handle a large volume of business.

Kevin R. Jackson, A. Perry Jackson and **James R. Jackson**, of the American Airlines, filed a petition for scheduled service between New York City and Washington, D.C., and between New York City and Washington, D.C.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Donald Airways, Inc., Dallas, Tex. filed a petition for scheduled service between Dallas and New York City, and between Dallas and New York City.

Transcontinental & Western Air, Inc., Kansas City filed a petition for scheduled service between Kansas City and St. Louis, Mo., and between Kansas City and St. Louis, Mo.

Polish Transportation Co., St. Louis filed a petition for scheduled service between St. Louis and New York City, and between St. Louis and New York City.

Leiforo Brothers, Phoenix, Ariz. filed a petition for scheduled service between Phoenix and Los Angeles, and between Phoenix and Los Angeles.

► **Air Mail Doubled, Express Tripled**—Another report, from Trans-Canada Air Lines, showed that carrier's air mail during the first six months of 1963 more than doubled over the same period a year ago. More than three times as much express was carried, and passengers increased by more than 17,000.

Mail load for the first half this year was 8,535,337 pounds, compared with 544,686. Air express was 332,213 pounds, against 107,434, and passengers were 64,342, compared with 47,650 in the first six months of 1962.

President Hears Plea of Domestic Lines

Solomon and Nields urge independence foreign routes.

The domestic airlines had their conference with the President last week on their five-point declaration of international post-war aviation policy last received no definite action from the White House on their report.

They were represented by Sam J. Solomon, president of Northeast Airlines, Inc., and Jack Nields, vice-president of Transcontinental and Western Air, who read the first salient points in the policy statement to Mr. Roosevelt and reviewed the rest of it in the 25 minutes they spent with the Chief Executive.

► **Sent Hag**—They also submitted a confidential memo—now Nields said "was" "so darn confidential we were afraid to carry it around." The

Branniff and TCA Traffic Spurts

Passenger and cargo figures reflect big gains.

An increase of almost 32 percent in passenger load factor has been reported by Branniff Airways for June this year, as compared with the same month a year ago. Specifically the percentages were 71.25 in 1962 and 94.50 in 1963. Passenger and cargo figures reflected big gains.

SWEDISH VISITOR:

Karl H. Larsson (right), chief engineer of the Swedish government airline, A. B. Aero Transport, is greeted at Washington by O. P. Larson, Trans-Canada Air Lines vice-president. On a visit to Canada, Larsson dropped in to exchange ideas with TCA executives.



CAP OFFICERS TOUR BASES:

A photographer for Western Air Lines caught three top officers of the Civil Air Patrol during their recent inspection trip of CAP squadrons in the West. Left to right are Col. Earle Johnson, national commander of CAP, Maj. Harry K. Coffey, regional assistant to Johnson and a well known aviation figure, WAIL vicepresident Jesse Willey, and Maj. Bertrand Irvine, California wing commander of CAP.

document was left with the President, when they found it an "amenable mood."

The visit of the White House had been scheduled previously, but was postponed. It was one of several being held with high administrative officials by the Airlines Committee for United States Air Policy, as the regulatory process unfolded.

Global Air Commerce—Interviewed by news men after the conference, Bolson repeated the prediction that most domestic airlines will file applications with the CAB to engage in international post-war air commerce, explaining that "I know of no domestic airline that doesn't have applications to engage in international service."

Open Market—Free competition is one of the points stressed in the agreement, the others dealing with private ownership, federal support for world-wide air transportation, freedom of transit in peaceful flight, and civil and commercial outlet acquisition.

A spokesman indicated that despite the harmony prevailing in the signing of the policy statement by all but one of the major domestic airlines, when it comes to the competition for routes each line will be on its own.

Overseas Certificates—This source said that the understanding is that the CAB "naturally will preserve the same discretionary power in granting overseas certificates as in domestic," adding that while all the lines have international aspirations,

no one expects all applications for overseas certification to be granted.

"It would be economically unwise," was the comment, "to have without competition. Competition must be regulated, with the CAB the selector."

United Still Holds Out—United Air Lines continued to withhold its signature to the statement as the week wore on, though reports persisted it would join the group before the month was out. Unofficially, word was that negotiations were continuing, with a compromise in sight. United was said to desire agreement by the other airlines to certain provisions not as the original statement.

Pan American Airways who, with American Export Airlines, did not sign the declaration, has written a letter to CAB stating that the fact it had not filed applications for post-war extensions of its international operations was not to be construed as meaning it did not intend to do so.

The letter was confidential, but was reported to contain a disclaimer of the general territory Pan American will seek to cover as its network after the war, without a description of specific routes.

Wolf Transferred

Brig Gen K. B. Wolf has been transferred from Wright Field to Maxwell, Ga., where he is heading up the D-25 Industry Committee.

CAB Completes Alaskan Survey

Changing conditions may bring reconsideration of territorial regulations.

Changing air transportation conditions in Alaska and the fact that the Civil Aeronautics Board has no office there has necessitated another trip to the Territory by a board representative. Raymond W. Slough, director of the board's Research Bureau, completed the first CAB survey—previous three times before Pearl Harbor.

No Funds for CAB—Alaska lines themselves, as well as the board, are said to favor establishment of a CAB office there. Last May the board asked Congress for \$12,000 to do so, but the money was not appropriated.

Slough Discovers—Slough found that since the last day, when an Alaskan pilot's log book, check book, and ticket notebook frequently carried, he had only operational record, progress had been made toward systematic and standardized accounts.

As a result, it was easier than it had been in 1941 for the director and Richard T. Monson, chief of the bureau's audit and rules division, who accompanied him, to obtain a clear picture of the situation as it stands.

Business Doubled Since '39—They learned, in informal conferences with the Alaska carriers at Anchorage, Fairbanks, Ketchikan, Juneau, and Nome, that operations and business volume has about doubled since they were in the Territory five May 15 to July 24.

Busy Cross-Roads—They also discovered a growing expectation among the Territory's operators that post-war international operators will make Alaska a busy cross-roads and a natural desire to see further development of flying facilities at that area to prepare for that situation.

Fast Freight—With little surface transportation, fast scheduled movement of freight virtually has been dependent on air operations since the days of dog teams. The man who "flew the bush" is the old days expect it to become increasingly so. Fifteen Air Lines—Fifteen air lines are operating in the Territory. Nineteen have authorization certificates, but four have applied for suspensions because owners or pilots have been called to service, or for other reasons.



Raymond W. Slough

Alaska's Differend—The board has indicated that conditions peculiar to Alaska may require special regulations, as apart from those governing air lines in the United States. There has been no feeling, on the other hand, that the Alaska lines should not be regulated, or should operate under a relaxation of the rules applicable to lines within the states.

Happier Landing—A number of factors bear on this. For a time, there was little or no regularity at and around T. Monson, chief of the bureau's audit and rules division, who accompanied him, to obtain a clear picture of the situation as it stands.

One-Way Traffic—A characteristic of Alaskan air traffic is that it is seasonal and often jurisdictional. The lines carry all classes of mail, and also fly rare property, in proportion to total operations, thus is the case in the States. Moreover, while better habits exist in the interior than formerly, some summer operations still are conducted with float ships, and skins occasionally are used in winter.



READYING FOR OVERSEAS RECORD:

A recent effort pouring for its picture, this big Lancaster took off to inaugurate Trans-Canada service by Trans-Canada Air Lines in the Canadian government's new wartime service for mail and military personnel. The plane set a 12 hr. and 20 min. record for non-stop flight from Montreal to Britain.

U. S. Chamber Studies Future Transport

International air and surface carriers are constituent members.

Proposals for a basic national policy in conversion of the nation's world-wide ship and airplane transport networks to peacetime systems will be discussed at a meeting in the near future of a special committee set up by the Chamber of Commerce of the United States.

The committee, sponsored by Eric A. Johnston, chamber president, includes representatives of

steamship lines, ship builders, exporters, exporters and seven representatives of international and domestic airlines and aircraft manufacturers.

International Study Only—Chamber officials emphasized that only international transportation problems would be considered and that the domestic field was not in the purview of this committee.

Johnston, in announcing the committee, pointed to our international air systems now serving war necessities and the numbers of war-built cargo planes and surface ships engaged in these services.

"How Shall We Operate?" "We



FIRST TRANS-CANADA MAIL FOR BRITAIN:

These men are loading the first batch of mail carried in Trans-Canada's new overseas air service. Left: E. B. Knighting (center), the Canadian Army Postal Corps, is supervising. The plane took 2,000 pounds of mail over in half a day.

have also constructed a great number of air bases, partly on our own, partly on the aid of other nations," Johnston said. "What is to be done with all these? And under what conditions is international air transport to operate?"

Great Future Ahead—"Anyone who has used our airlines which span the continent in all directions or who has seen what air transportation has accomplished in connecting up the coasts of the Americas will readily agree as to the great future that lies before world-wide aviation," Johnston added. "The United States, with its technical and other resources, measured by our production of nearly 100,000 planes a year, will naturally take a leading part in its development."

Aviation Executives on Committee—Ralph B. Dumen, vice-president and general manager, American Airlines, John G. Cooper, vice president, Pan American Airways; P. G. Johnson, president and general manager, Boeing Aircraft Company; W. A. Patterson, president, United Air Lines, John E. Slater, executive vice-president, American Export, J. A. B. Smith, vice-president, Curtiss-Wright, and R. J. Solomon, president, Northeast Airlines, are members.

Chairman of the committee is William E. Jackson, vice-president and general counsel, United Fruit Company.



Bulldozers Cleanup of the boundary marker beacons at Washington National Airport that area intently equipped planes toward the runway in the background, enabling instrument landings in thick weather.

New "Blind" Landing System, Aid Pilots

CAA reports progress on 100 airport installations.

Instrument landing systems are being installed rapidly by the Civil Aeronautics Administration for the



Boundary Beacon: A technician inspects the transmitter of a marker beacon at Washington National Airport. The beacon is located at the approach end of the runway, and with others at various distances guides planes to instrument landings.

Army at approximately 100 airports. **Knocks Out Thick Weather**—The CAA already has put in these facilities, which enable planes to land in thick weather, at Washington, New York, Chicago, Kansas City, Cleveland, Atlanta and Los Angeles, and is installing one at Oakland. The National Airport at Washington was the first commercial airport to have the equipment.

Strictly Military Production—Receivers for aircraft use with the installations are being produced in large numbers for military planes, the only ones in which they are being placed at present. They were on order by the airlines when the war decreed the stop.

Strictly equipped planes can land in dense weather at the rate of about one every three minutes at airports with the facilities. Without them, three to five times that long is required, if they land at all.

Contract Termination Plan Cited by WPB

Terminative draft is circulated among interested parties.

A tentative draft of proposed regulations dealing with contract terminations is now being circulated among interested parties by the War Production Board as one of the steps being taken to slay apprehensions among industry executives regarding government policies that will form the basis for postwar settlements.

Contract Invited—This proposal, which covers all phases of the situation, is said to be a modification of previous attempts for a standard termination clause. It is being distributed now merely for comment and suggestion and has no official approval from any source at this time. Congress, WPB and the Army and Navy are seeking some method to deal with contract cancellations.

Concerns Warned—The Army is reported to have terminated already nearly 5,000 contracts and the Navy about 1,500. These contracts involve many firms when subcontractors are considered. Many of these terminations are unsettled, causing understandable concern among contractors. Uneasiness among some contractors is reported to have caused some loss in production.

Guide to Congress—Replicas from the proposed regulations now being circulated are expected in time to act as a guide to Congressional consideration.



W. L. Jack Nelson, formerly chief of the WPA Aircraft Priorities Branch and chairman of the Civil Aircraft Subcommittee to administrator L-203, has been named assistant director of the Civil Aeronautics Administration's War Transport Service.

Mr. Nelson will act as a special assistant to R. McLean Stewart, executive director for human work between CAA, WPA, the Joint Aircraft Committee, the Munitions Assignment Board, the Defense Plant Corp., War and Navy Departments and other agencies responsible for the procurement and maintenance of aircraft and supply materials, parts and equipment.

For over a year Mr. Nelson has been at WPA and was originally in the now defunct Aircraft Production Division where he did his work as expert in aviation insurance and worked with the United States Aviation Insurance Group. Born in Memphis, Tenn., he started his aviation career as general manager of the Mid-South Airways at Memphis.

Arthur A. Arnold, United Air Lines passenger agent at La Guardia Field, N. Y., since the field opened in December, 1939, has been appointed chief passenger agent there for United.



In his new post as chief of the Technical Development Division of the Civil Aeronautics Administration, Donald M. Stewart expects to continue the flying that already has given him 3,000 hours in the air.

As Chief Aeronautics Inspector for CAA, Stewart did a lot of flying alone. In a CAA plane he now has, which he took over as a test pilot, given him charge of CAA experimental work on aircraft, radio, airports, charts and other war and post-war aviation projects.

The new division chief came to Washington in 1929 with the National Bureau of Standards. He transferred to the Bureau of Air Commerce in 1934, when it took over the Bureau of Standards' work in aviation radio. His 1,000 hours took him on trips to check CAA airways facilities "all

over the United States and Alaska," CAA says. Stewart is married and has one child. He was born in Des Moines, 38 years ago.

F. W. Wilkiss has been named assistant to Cuckley Putnam, president of Chicago and Southern Air Lines. He has been connected with Dan B. Bradford as manager of special investigations and analyses in the Memphis district.

Miss Maybelle McFarland has been appointed assistant chief business of Pennay Intracontinental Airlines, with headquarters at the Washington National airport. A member of PCA's business staff for the last two years, Miss McFarland formerly trained student business and was herself a student Washington and Detroit-Milwaukee runs.

Reg. Gen. C. H. Smith, formerly president of American Airlines, has been promoted from Chief of Staff of the Air Transport Command to Deputy Commander. In the absence of Maj. Gen. Harold George General Smith, now General of the Air Force, Smith was commissioned a Colonel in the Army of the United States on April 15, 1942, when promoted as October 1942. Succeeding General Smith as Chief of Staff is Brig. Gen. Robert E. Newland, a class personal friend of General George. Newland goes to the Air Force from Flying Training Command. He was Commanding General, Third Flying Training Wing at George Field, Ill., and has been in the Army since the last war when he served overseas. General Smith, as chief of staff to General George, retired in the director of the Air Force before promotion will give him even more control.



William E. Gross, formerly plant manager of the Liquid Cooled Engine Division, Aviation Corp., has been transferred to plant manager of the Spinner Rotor Division of the company. For 17 years before becoming associated with Aviation Corp., he was with Chrysler Corp., including a period as plant superintendent. Prior to taking the position as plant manager of the Liquid Cooled Engine Division, he was plant manager of the company's Ignition aircraft engine division at Wilkes-Barre.

James H. Lough, formerly chief engineer of McDonnell Aircraft Corp., has assumed the new position of chief engineer, replacing John W. Smith, who has become assistant to the president. A University of Illinois graduate in Aeronautical Engineering, Lough served McDonnell several years ago from Glenn L. Martin Co., where he was assistant project engineer on the XPB-1 flying boat. Before going with McDonnell, Lough was chief project engineer on the Republic P-47 Thunderbolt.



Garret C. Gering (left), former assistant chief engineer of McDonnell Aircraft Corp., has assumed the new position of chief engineer, replacing John W. Smith, who has become assistant to the president. A University of Illinois graduate in Aeronautical Engineering, Lough served McDonnell several years ago from Glenn L. Martin Co., where he was assistant project engineer on the XPB-1 flying boat. Before going with McDonnell, Lough was chief project engineer on the Republic P-47 Thunderbolt.

Gordon S. Lough has been appointed assistant to the advertising manager in charge of production at American Airlines. He was formerly with the advertising agency of American Airlines, who was with Doremus and Co. before joining American Airlines. He has been in advertising seven years and is a member of the New England Aviation Club. He has been in advertising seven years and is a member of the New England Aviation Club.

Recently promoted from commander to captain were these well known Navy aviators: officers P. T. Wood, now director of training, Lewis D. Flynn, director of special device section, and H. B. Miller, director of the training literature section.

Ronald F. George, operations manager of Trans-Canada Air Lines, was captain of the PCA crew who established a new non-stop record from Montreal to Britain, flying a large transport plane in the Canadian government's new wartime transatlantic service for the carriage of mail to and from the Dominion's overseas



James H. Lough, formerly chief engineer of McDonnell Aircraft Corp., has assumed the new position of chief engineer, replacing John W. Smith, who has become assistant to the president. A University of Illinois graduate in Aeronautical Engineering, Lough served McDonnell several years ago from Glenn L. Martin Co., where he was assistant project engineer on the XPB-1 flying boat. Before going with McDonnell, Lough was chief project engineer on the Republic P-47 Thunderbolt.



United Air Lines appoints W. A. Boeve (left) and S. T. McDermott (right) to head departments opened in connection with the new route into Washington. McDermott goes to Washington from LaGuardia Field, and will be manager of passenger service. Boeve, former Philadelphia station manager, will be Washington station manager. Richard F. Dorsey, former assistant station manager for United at Cleveland, will be assistant station manager in Washington, and Richard Rugg, former senior passenger agent at Omaha, has been named chief passenger agent, Chicago, as United's general department in charge of procedures and of H. W. Harrison as his assistant. Furness has been in charge of Selective Service matters for the personnel department and will continue this work in addition to his new duties. L. A. Neil, Victor Shawe and D. H. Robinson have been named personnel representatives at Seattle, San Francisco and Chicago, respectively. Newswomen's counselor for the company's personnel department in the east is Gladys C. Fisher. Michael R. Howard will hold a similar position in the west.

Frank Shogler, formerly industrial relations director for Ranger Aircraft Engine Division of Fairchild Engine & Airplane Corp., has been appointed director of industrial relations for Blount Shook Nut Corp., according to an official announcement. Shogler was released by the latter corporation.

Mrs. Janet Campbell Goss was recently appointed assistant to Jack Balke, Washington representative for Hill and Knowlton, which handles public and industrial relations for Consolidated Vultee Aircraft Corporation.

Ed Sullivan has returned to Pennsylvania. His duties as director of sales, a position which will be concerned largely with post-war planning. Associated with the company since 1934, Sullivan was named 18 months ago to the Air Transport Association to aid in coordinating military and civilian needs in air transportation. His previous work with

have included an assignment in the Washington traffic office, Pittsburgh district traffic manager, and chief of station. Prior to receiving his leave of absence he was in charge of sales.

New general manager of the Allison division of General Motors is E. D. McNeil, filling a position vacated by F. C. Krieger. General Motors vice-president, who, due to illness, has been granted a leave of absence.

Harry O. Smith, McDonald Aircraft Corp. consultant since 1942, has announced that he will be director of industrial relations. He was engaged in the practice of law after completing his studies at the University of Missouri and the Kansas City School of Law and for eight years and industrial work for the National



Smith relations work for the National Lead Co.

C. F. Linick, who has been appointed chief resident auditor of the Navy division, Consolidated Vultee Aircraft Corp.

E. A. Seachow, distinguished photographer who directs the photographic unit in the Navy Bureau of Aeronautics' training literature section, has been promoted from lieutenant commander to commander. He was recently returned but almost immediately resumed to active duty. Seachow is now in charge of the photography unit from all over the country for the excellence of Navy photography.

William F. Nelson, formerly assistant director of CMP, has joined the Aircraft War Production Council (West Coast War Production Administration) before the war. Nelson will advise the council on materials, particularly CMP products. He will work in Washington, Wright Field, and Los Angeles.

Two personnel changes have taken place at Lockheed and Vega Aircraft Corp. William J. Rosell, Jr. (left) is now



as the company's industrial relations director. H. D. Robinson will continue

as industrial industrial relations director. At the request of the government and of the aircraft industry, Irvan has become executive assistant to the management committee of the 1945 policy committee. He has served as a member of this committee since its inception, dividing his time between Washington and Baltimore. In addition, Irvan has been appointed the company's assistant to the administrative vice-president, in which position he will advise the management on industrial relations policies.

John H. Bond has been made assistant to the New England Aircraft Manager, American Airlines.



Bond graduated from the University of Pennsylvania in October, 1936. He has been in the district office in New York in the aviation department, a

representative, assistant to the manager of passenger sales, and assistant to the general traffic manager.

A. C. DeLaune, former manager of the Red Bank, N. J., plant of Bendix Aviation Corp., has been promoted to chief manager of the Pratt & Whitney Division at Baltimore.

Norm of Henry Equipment Corp. of Long Island City, N. Y., has been engaged to sell the Shub Industries



line, according to an announcement by Allen H. Weiss, president of Shub Industries. There are no changes in the divisions of officers of the corporation and its personnel in its experimental work with the U. S. Army Air Forces and aircraft manufacturers. Henry Brodsky will remain as chairman of the board of directors, Max Gen. William A. DeLaune (left), as vice-president; and Thomas F. Hanley, as treasurer and general manager.

J. Klein Jones, former flyer for the Navy and several airlines, has been appointed flight supervisor for Consolidated Vultee Aircraft Corp. Communications, Trans-Pacific air transport line to foreign service for the Air Transport Council. Jones has spent his war years as a flight instructor at Arnold, N. Y., and has been accepted instructor with GAA's air safety board.

Henry Dreyfus, industrial designer, has been appointed consultant in the design of aircraft by Consolidated Vultee Aircraft Corp.

FINANCIAL

Renegotiation Element Demands Close Scrutiny of Statements

Settlements with government bringing widespread revisions in 1942 reports of aircraft manufacturers.

By ROGER WILCO

Aircraft earnings 'don't mean a thing' unless they have that renegotiation. This is becoming increasingly evident with the disclosure of revised 1942 earnings by many companies as a result of renegotiation proceedings.

Consolidated—For instance, Consolidated-Vultee reported net earnings equivalent to \$3.04 a common share for the fiscal year ended November 30, 1942. It is now revealed that the Consolidated and of the merged enterprise has just concluded its renegotiation of contracts for 1942 which requires the return of an additional \$34,000,000 to the government. Allow for 50 percent of this amount to be taken up by reduced common profits taxes, net income would be reduced by only \$3,000,000. This would equal the net share earnings to a little under six per share. (This makes possible a net share income equivalent to \$1.4 per common share. That compares to \$3.53 6/8 or \$1.18 per share for the similar quarter a year ago. Current earnings, however, are subject to renegotiation of contracts now making the final figure to some extent.

Vultee—The Vultee end of the combined enterprise has yet to conclude its part of the renegotiation now making a concrete figure for the company impossible at this time. While the management, at the time of the release of the last annual reports, noted that results were subject to renegotiation, little information was attached by the public to this statement, and generally earnings of \$1.04 per share were accepted as being "official" and final. It is now clear that the eight must be lowered.

Lockheed—Similarly, Lockheed completed its renegotiation of contracts for 1942. In this instance, an adjustment of about \$48,000,000 to be returned to the government was agreed upon.

Lockheed—Similarly, Lockheed completed its renegotiation of contracts for 1942. In this instance, an adjustment of about \$48,000,000 to be returned to the government was agreed upon.

Lockheed—Similarly, Lockheed completed its renegotiation of contracts for 1942. In this instance, an adjustment of about \$48,000,000 to be returned to the government was agreed upon.

Lockheed—Similarly, Lockheed completed its renegotiation of contracts for 1942. In this instance, an adjustment of about \$48,000,000 to be returned to the government was agreed upon.

however, the company's net liability was increased by \$3,000,374. This net amount is being charged against 1942 income. More properly, however, this figure should have been used to reduce the 1942 reported earnings of \$2.56 per share by about \$2.00. It was 1942 operations that were being adjusted.

Before or After—These examples illustrate the necessity of making certain whether earnings reports are before or after contract renegotiations and recognizing the narrowing implications.

Interim earnings reports for a number of aircraft companies are now being released and are qualified by the renegotiation element.

United Aircraft—United Aircraft Corporation reported for the quarter ended June 30, 1943, a net profit of \$4,474,168 after charges and federal income taxes equivalent to \$1.4 per common share. That compares to \$3.53 6/8 or \$1.18 per share for the similar quarter a year ago. Current earnings, however, are subject to renegotiation of contracts now making the final figure to some extent.

Bearing this possible adjustment in mind, net earnings for the six months ended June 30, 1943, totaled \$4,150,013, equal to \$3.61 a share on the common. This compares with a net profit of \$3,534,988 or \$3.37 a share for the first half of 1942.

Post-War Business Growing—The post-war revenues for United Aircraft are also making gains. During the first six months of 1943, an addition of \$2,114,325 was to the reserve to provide for costs incident to transformation to post-war conditions. This amount is equivalent to the post-war earnings of \$2.00 per share. The total amount of this reserve, including post-war tax rebates, aggregated \$36,911,623 as of June 30, 1943.

Nordrop Aircraft—Net income of Nordrop Aircraft, Inc., after all charges and taxes for the fiscal year ended July 31, 1942, was estimated at about \$3.6 million or about \$4.00 a share by LaMotte T. Cobb, chairman of the board. However, these earnings are before any renegotiation or contract renegotiations. As a matter of interest, net profits for the fiscal year ended July 31, 1942 amounted to \$3,644,741 equal to \$5.60 a share. The renegotiation factor is a complicating element but for accurate appraisal a second look is required at earnings reports currently being released.

Reporting Firms Show Profits

Northing to issue stock, Bendix, North American announce.

Northern Airlines, Inc., to provide funds for contemplated expansion, will offer to stockholders 200,000 shares of authorized, unissued common stock, plus a pre-emptive subscription rights, additional shares will be offered on the basis of two additional shares for each three shares now held. The plan will be underwritten by Lee Higginson Corp., associated with Pierce, Fenner & Smith.

Bendix Aviation Corporation's net sales and operating income for the nine months ending with June 30, 1943, were \$192,143,113 from \$107,891,349 for same period last fiscal year. After provision for federal taxes and estimated profit adjustments, net income for the nine months was \$11,096,831, equal to \$5.67 a share on the capital stock. Net income for 1942 period was \$11,053,050, or \$5.22 a capital share, after provision for federal taxes, after provision for federal taxes, after provision for federal taxes.

Edward G. Budd Manufacturing Co. has been admitted to the New York Stock Exchange.

North American Aviation, Inc., after renegotiation of contracts announced a revised net income for 1942 equal year from \$18,536,613 to \$7,370,426. The original figure represented a 4 percent of sales as compared with the year ending June 30, 1942, whereas the revised figure represented 2.8 percent of sales. The revised report also announced a bank credit of \$75,000,000 under a V-Loan.

Let the People Know

THE AIR TRANSPORT COMMAND continues its unwavering and strict censorship of information on the airlines' contribution to winning the war. Conferences between airline officials and a small group of ATC officers on the subject have been without date.

Now the ATC claims it has drafted and redrafted liberalized regulations. But none has been approved after weeks of dilly-dallying, and realistically minded air transport men doubt if they ever will be as long as ATC stamps all news material before it ever gets to the War Department's Bureau of Public Relations.

Nearly all of the lines are performing vital tasks for the Army. They are operating cargo routes, on schedule, all over the United States, into Canada and Alaska, to Latin America, to Australia and to England. They are training crewmen by the thousands, on the ground and in the air. They are operating huge bases for maintenance, repair and overhaul of Army craft.

They are flying the world's leaders everywhere—Dwight D. Eisenhower, Madame Chiang. They flew the President to North Africa and back. They are performing other tasks rightfully secret.

Nevertheless, much information being withheld by the ATC is not secret. Much can and should be told.

Every other industry from automobiles to refrigerators, pianos and pickles has been permitted to release lengthy and lavishly illustrated descriptions to the press on their conversion to war. Lists of war services by individual companies are mentioned daily by the Army and Navy public relations officers for advertising in the press.

Time after time the President in his press conferences and addresses to the nation has dwelt at length on enthusiastic recitals of the great job being done by the men and women at work in tank and airplane and munitions plants.

Worker morale has been a top concern of the Administration since the start of the old national defense program.

Yet the executives of the nation's airlines as far have been pretty well ignored in all these speeches of appreciation. They can't understand it. Neither can a lot of others.

Comprehensive and accurate reports to the people have been emphasized recently by the Administration's high command. As we have made progress censorship has been relaxed continually by the public relations divisions of the armed services and the Office of Censorship. We are now even permitting monthly publication of exact production figures for combat aircraft.

"Tell the people as much as possible about their own war" is an avowed principle of the important war agencies. The people are being told more

month by month, and rightfully so.

Yet there still remains posted on the wall of the public relations officer of the ATC this subversive and boisterous legend:

"Never have so few kept so much from so many." It's time the ATC wakes up.

It it doesn't, the War Department's Bureau of Public Relations should take the situation over. And when that happens Elmer Davis' OWI should be called in to prepare a complete and factual summary of what the airlines have done, line by line, and bring the people up to date.

Workers Make War Plans

ONE OF THE NATION'S INDUSTRIALISTS in a high war production job in Washington last week was puzzled. Entire campaigns are based on estimates of bomber and fighter production two, three and six months from now. Why, he asked, isn't this fact fully realized?

One answer is that the all-important aircraft workers don't realize it.

They should be told that every plane leaving an assembly line today has already been assigned to a theater of war, and that an important officer somewhere in Europe or the South Pacific is awaiting the planes he has been promised.

They should be told that although we are winning the war, we can't continue to do so if worker absenteeism prevents us from replacing tomorrow the warplanes we lose over Germany today.

Furthermore, we must not only replace every fighting plane we have in the field, we are committed daily by the Army and Navy public relations officers for advertising in the press.

Morale-building lectures to workers so far have been limited mainly to Army and Navy cad officers from Washington talking an uninteresting generalities, or flyers back from the battle fronts who flew planes the workers built six months ago or more.

The workers need to have a sense of immediacy. They need to know how the planes they are working on at that moment affect the war plans being made in Washington, or in Quebec, at this moment. They need to know how aerial onslaughts are keen, and how some are still being revised because absenteeism July 4 cut bomber production. A concentrated effort by the Army, Navy and OWI in dramatizing the birth of war plans (without giving away military secrets) and, specific instances of how reduced output prevented operations, would do more for morale than any number of dry speeches given at Army-Navy "E" presentations or "pop" sessions resembling football games. War plans being made now are up to the workers. Let them know about it.

ROBERT H. WOOD

CONVOYING SKY-HIGH! Production

Hansen
AIR HOSE COUPLINGS AND
HOSE CLAMP SOCKETS

Hansen air hose couplings and hose clamp sockets have been one of the big contributing factors in the tremendous production records now being set in the aviation industry, shipyards, large and small industrial plants throughout the world.

Designed, engineered, and built for speed and ease of operation, Hansen air hose couplings and hose clamp sockets will take the rough, tough going, day in and day out, without air leaks or air wastage. They score from ease of use.

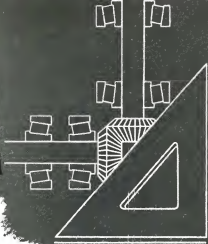
Simple and easy to operate. Push plug into socket, it is connected. Air is automatically turned on, slight pull on cable in hose, air is automatically turned off, and hose clamp socket is disconnected. Hansen pressure will over 12,000 pounds.

Hansen hose clamps have two grips instead of one, inside and outside of hose—a two to one advantage over other clamps. Easy to install, requires no special tools, can be used many times over.

Send for free catalog on Hansen Industrial Air Line Equipment.

HANSEN MFG. COMPANY
CLEVELAND, OHIO

DESIGNERS AND BUILDERS of Planes for Vertical and Horizontal Flight



There power makes a right angle turn
The Timken Bearing is the ideal bearing to use

Here's Why

PAST PERFORMANCE. There are actually millions upon millions of Timken Bearings in service in industrial and automotive gear applications. Their performance has been outstanding and in these thousands of different *kinds* of applications you find every requirement in bearing design, mounting and performance that will be necessary in your particular field.

SMALL SPACE, LIGHTNESS. The Timken Bearing is a tapered roller bearing. Since load carrying elements form a line contact you get maximum load carrying ability in a given space.

THRUST LOADS AS WELL AS RADIAL. The tapered construction of the Timken Bearing, whereby lines drawn coincident with the tapered surfaces of rollers, cup and cone, meet at a common point, results in not only true rolling motion but also enables the bearing to carry thrust loads as well as radial loads or both together in any combination. This is important in any spiral bevel gear application since gear operation in itself sets up thrust loads. Moreover, Timken Bearings are made in such a wide range of sizes and tapers that you can select the most desirable combination for any given set of loads.

GEAR SETTING AND ITS MAINTENANCE. With Timken Bearings you can achieve in assembly any desired gear setting and the setting achieved can be maintained indefinitely.

QUIETNESS. Quietness is thought to be just as desirable in airplane as it is in automobile service. Moreover, quietness in bearing performance implies smoothness and that is desirable wherever wheels, shafts or gears turn. It was Timken Bearings and our knowledge in applying them that overcame the tremendous bearing problems foreseen by the automotive industry when it decided to use hypoid axles. The Timken Roller Bearing Company, Canton, Ohio.

TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.
TAPERED ROLLER BEARINGS